Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Exercises for base of thumb pain

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Exercises for Base of Thumb Pain

Patient Information

Hand Therapy Team

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Exercise

Exercise can help to reduce joint stiffness, improve flexibility, and reduce pain. Exercise can strengthen the muscles around the base of the thumb and within the hand to support the function of the thumb.

Your therapist will advise you on the frequency and repetition of each exercise. Sometimes, exercising the thumb can be uncomfortable. If the exercises generate pain, this should last no longer than 24 hours before recovery. Exercise should not be repeated until your pain has resolved and may require a rest period before re-commencing. If discomfort persists for more than 24 hours after exercising, contact your therapist for advice.

Warming up

Heat and warmth can be beneficial to movement and stretch and is an important preparation for exercise. Warm the hand in a bowl of warm water for 2-3 minutes. Move your thumb in a circular, clockwise direction within the water for about a minute. After this time, rotate the thumb in an anti-clockwise direction within the water for a further minute.

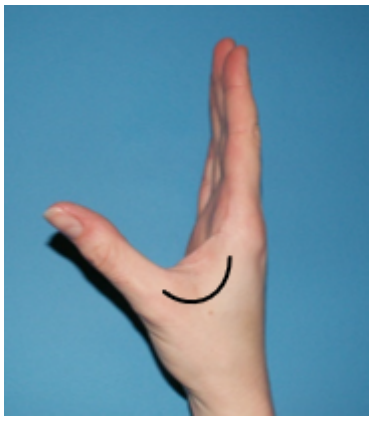
Stretches

Sometimes the muscles around the thumb can become tight and the thumb cannot stretch away from the palm as wide as it used to. This is called the thumb web space, and it can tighten in patients with thumb Osteoarthritis (OA). This can limit movement of the thumb and cause poor positioning of the thumb in activity.

If it is appropriate, your therapist will show you techniques to relieve pain, improve movement and stretch any tightness of the soft tissues.

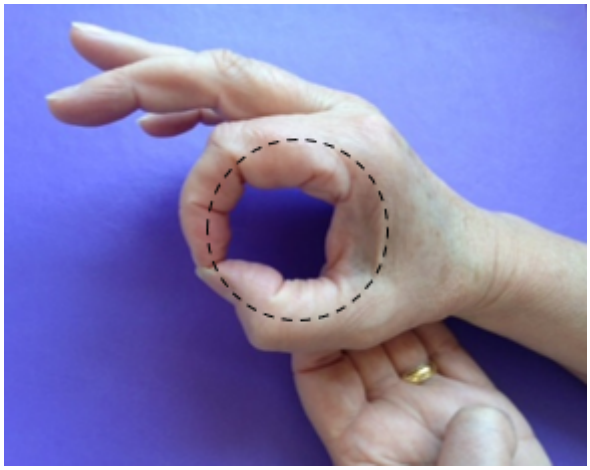
Your therapist will advise you individually on what is best for your thumb.

These techniques may be introduced before certain exercises to put your thumb in a better position before movement.



Positioning

When performing exercises of the thumb, it is important to be aware of your thumb's positioning. The joints of your thumb work best in function when they are slightly bent. Maintaining a wide web space and stable thumb position when pinching, known as an 'O' shape pinch, is the best way to use your thumb in functional tasks.

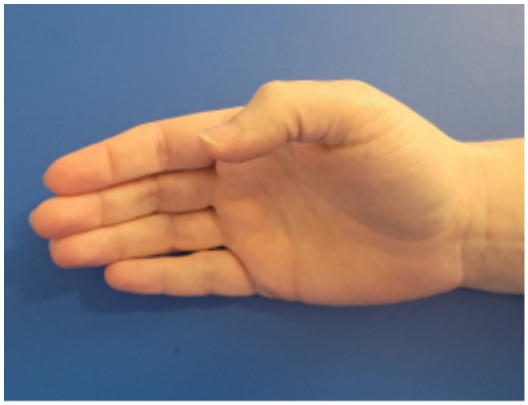


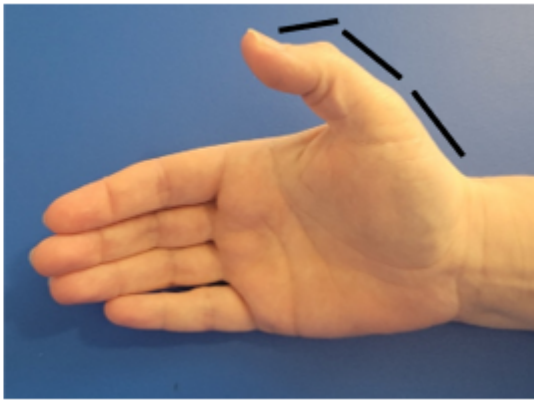
Stage 1

1a) Thumb Extension

Rest your hand on a table on the little finger side, with the thumb relaxed.

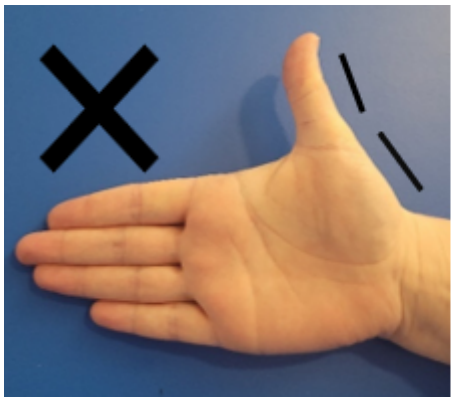
Lift your thumb upwards, keeping the end thumb joint slightly bent (as shown)

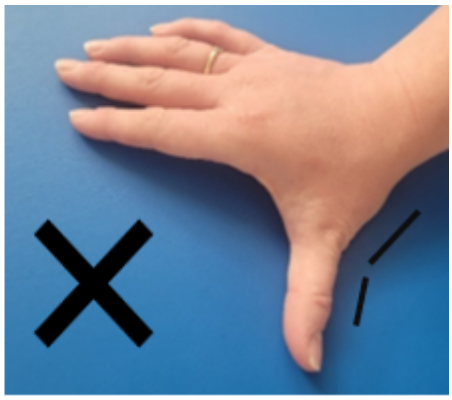




Hold this position for 10 seconds and then relax. Repeat the exercise 10 times.

Do not over straighten (hyperextend) the joints of the thumb (as shown).

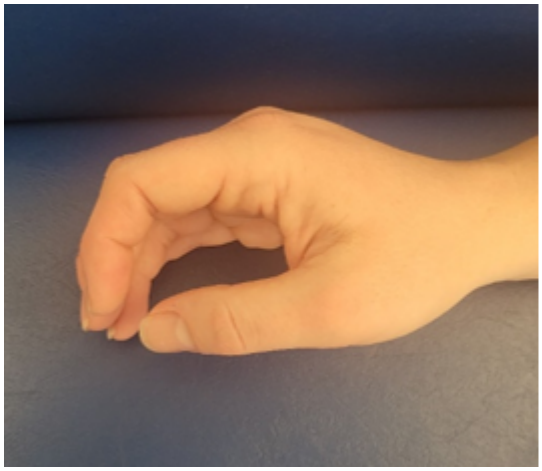


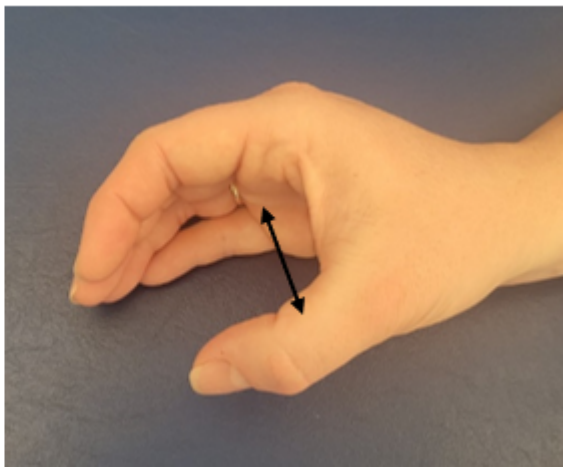


1b) Thumb Abduction

Rest your hand on a table on the little finger side, with the thumb relaxed.

Lift your thumb outwards, keeping the end thumb joint slightly bent (as shown).





Hold this position for 10 seconds and then relax. Repeat the exercise 10 times.

1c) Opposition

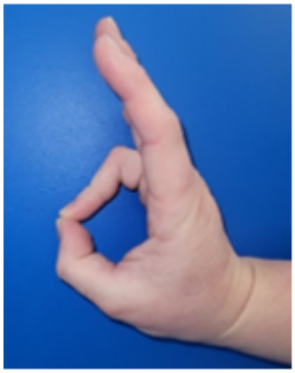
Rest your hand on a table on the little finger side, with the thumb relaxed.

Bring your thumb across to touch the tip of each finger. Ensure you make an ‘O’ shape when the fingertips touch, keeping the thumb joints slightly bent (as shown).

Hold this position for 10 seconds and then relax. Repeat the exercise 10 times.









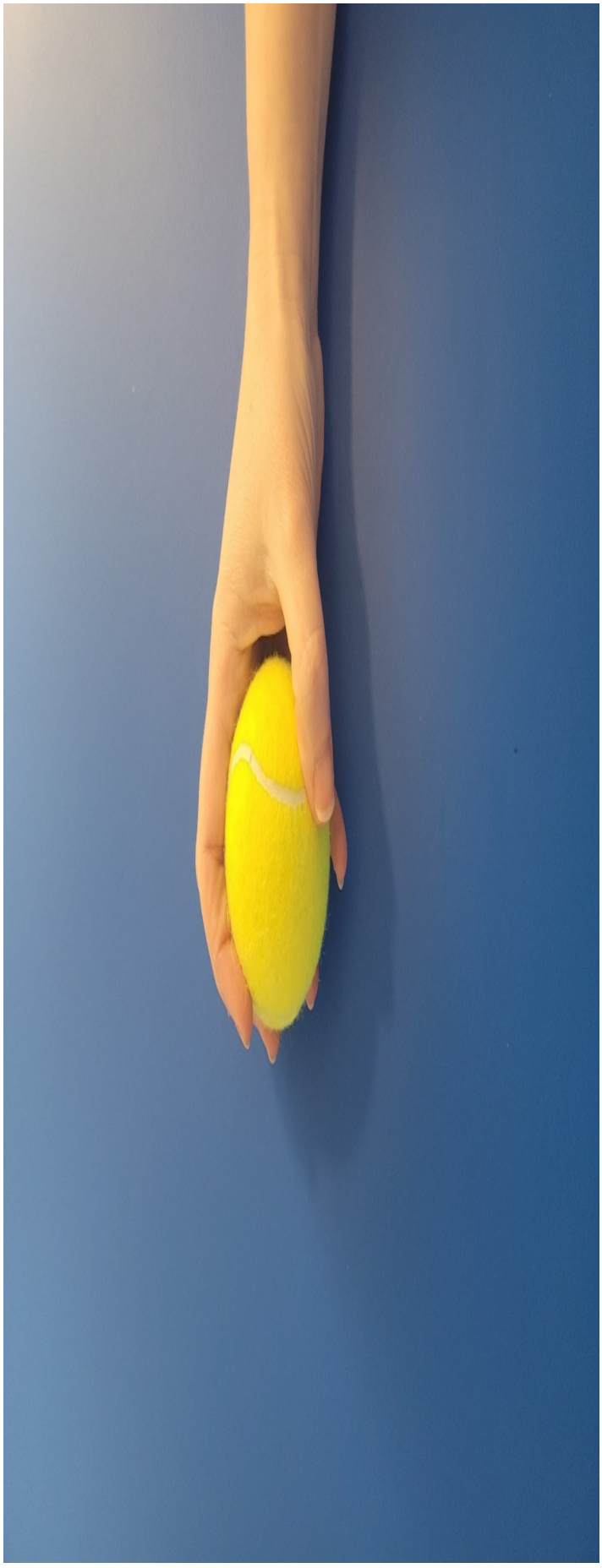
Do not pinch through the thumb with the end joint in a straight or hyperextended position (as shown).



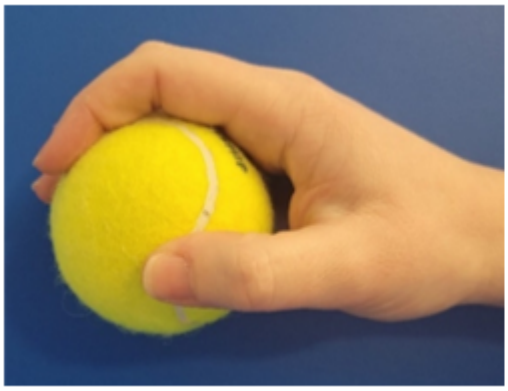
1d) Proprioception

Place a tennis ball in your palm with your fingers placed over the top and your thumb relaxed to the side (as shown)

Stretch your thumb outwards around the ball and then rotate the ball around using your fingers and thumb.



Following the white line on the tennis ball can be useful to focus your finger and thumb movements.





Try to keep the thumb in an ‘O’ shape posture whilst moving the ball around.

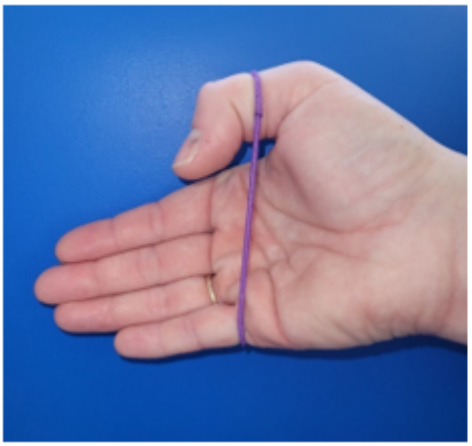
Continue for 2 -3 minutes.

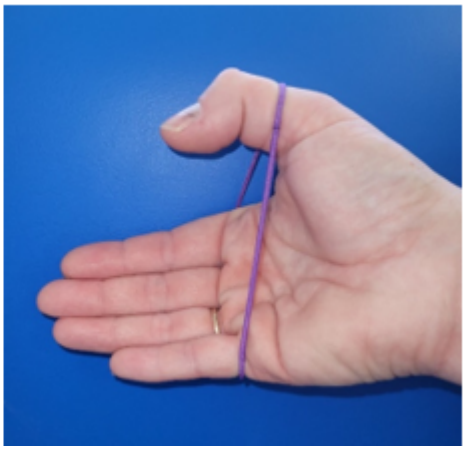
Stage 2

2a) Resisted Extension

Place a rubber band or equivalent around your hand and thumb (as shown).

The band should go across the middle section of the thumb.





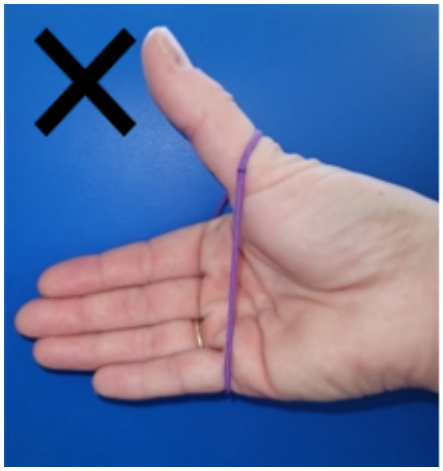
Stretch the band slowly upwards. Try to keep the joints of the thumb slightly bent when pulling against the

band.

Hold the stretch for 5 seconds against the pull of the band, and then slowly release. It is equally important to control the recoil of the band when relaxing the thumb; do not let the band pull the thumb down.

Repeat 10 times.

Be careful not to over straighten the thumb joints (as shown).

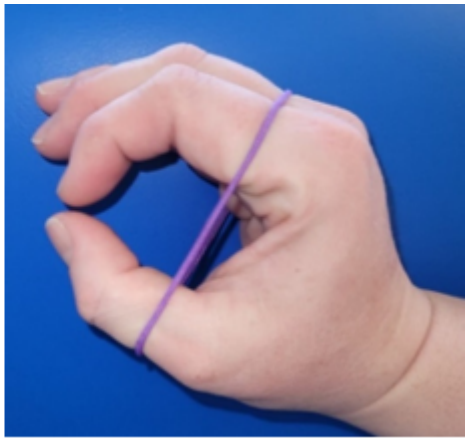


2b) Resisted Abduction

Place a rubber band or equivalent around your hand and thumb (as shown).

The band should go across the middle section of the thumb.





Stretch the band outwards whilst keeping the end joints of the thumb slightly bent.

Hold the stretch for 5 seconds against the pull of the band, and then slowly release. It is equally important to control the recoil of the band when relaxing the thumb, do not let the band pull the thumb back in.

Repeat 10 times.

2c) Resisted finger abduction

Place a rubber band or equivalent around your fingers (as shown).

Stretch the index finger outwards against the resistance of the band. Hold the stretch for 5 seconds against the pull of the band, and then slowly release. It is equally important to control the recoil of the band when relaxing the index finger; do not let the band pull the finger back.

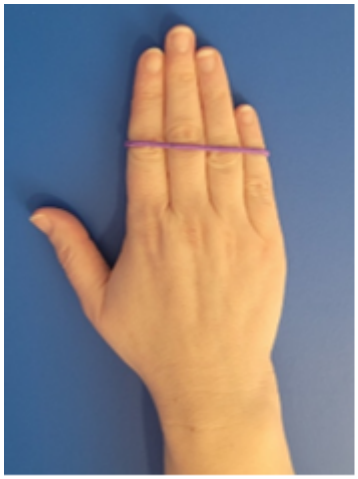
Repeat 5 times.

Progress the exercise by bringing your index finger and thumb together into an ‘O’ shape posture, pulling

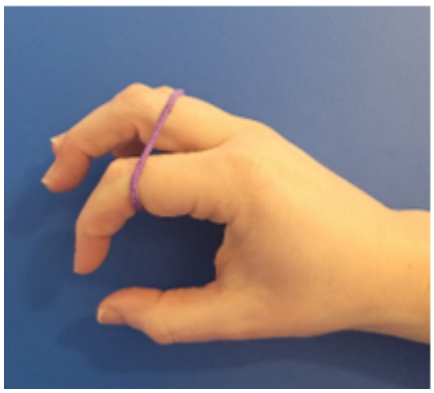
against the resistance of the band.

Hold the stretch for 5 seconds against the pull of the band, and then slowly release. It is equally important to control the recoil of the band when relaxing the index finger; do not let the band pull the finger back.

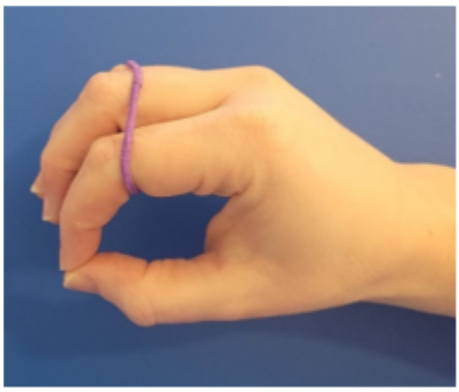
Repeat 10 times.











Stage 3

Pinch postures

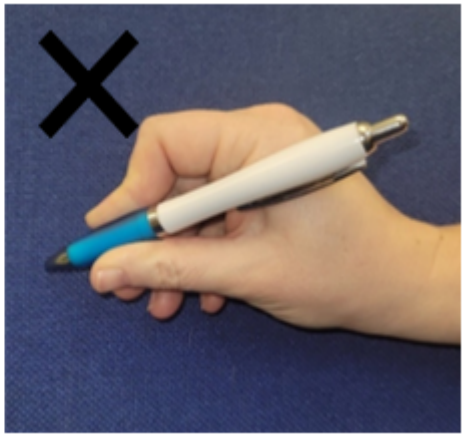
In this final stage, the position of your thumb in function is looked at. The posture your thumb adopts when pinching is important for stable loading through the base of the thumb.

Keeping the joints of the thumb slightly bent when applying pinch, and maintaining an ‘O’ shape pinch posture, is the best position to use the thumb in.

3a) Pen grip

Practise writing a sentence using the correct thumb posture. Repeat the sentence 5 times.

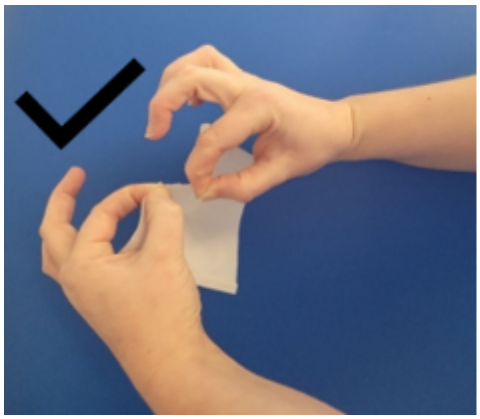


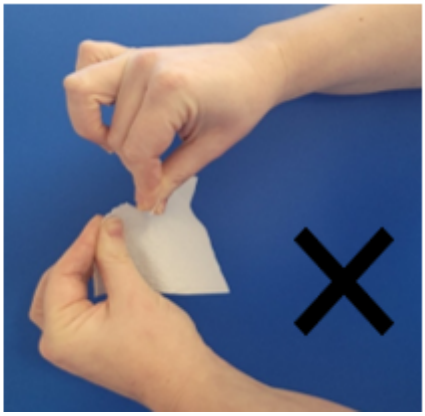


3b) Paper tear

Practice tearing a piece of paper using the correct thumb position (as shown).

Repeat this 10 times, maintaining a good posture of the thumb as you tear.

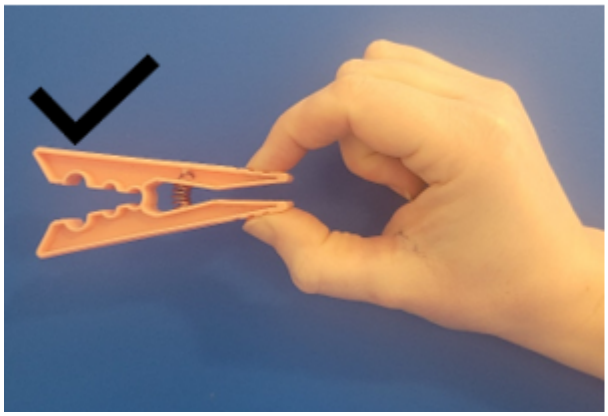


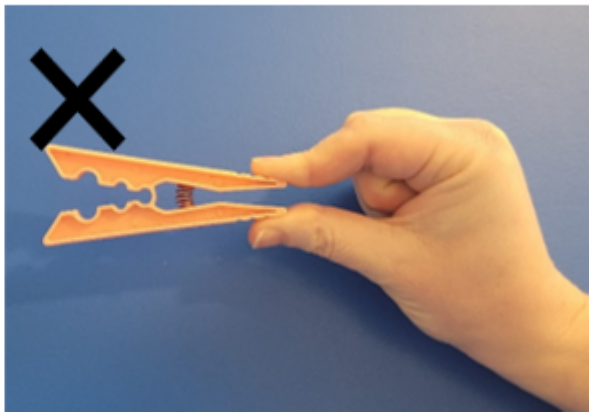


3c) Peg pinch

Practice gently squeezing a peg using the ‘O’ shape pinch (as shown).

Squeeze the peg and then slowly release the pinch, whilst maintaining the correct thumb posture



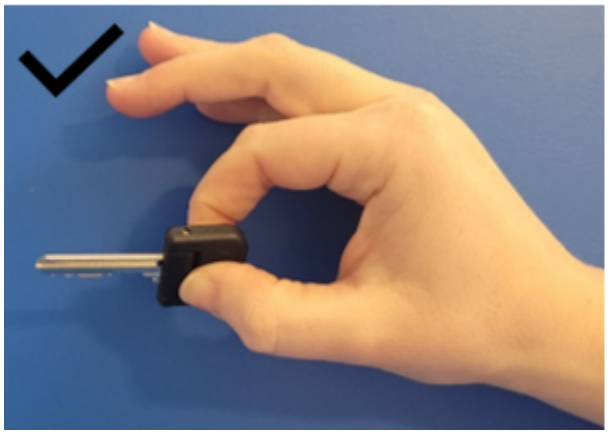


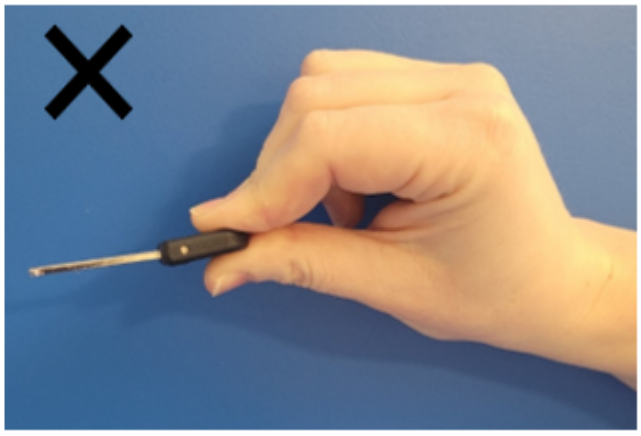
3d) Key turn

Practice holding a key using the correct thumb position (as shown).

Place the key in the lock and turn, whilst maintaining the correct thumb posture.

Repeat this 10 times.





Once you can maintain the correct thumb posture, try to use it consistently in all functional activities when pinching or gripping with the thumb. New patterns of movement take time to become established in the brain, so repetition is important to encourage this to become the new norm.

Disclaimer

Not all exercises are suitable for everyone, and while every precaution has been taken in selecting t hese exercises, they do not come without risks. If you have any concerns regarding these exercises, discuss them with your therapist.

The exercise plans shown in this leaflet are designed to be used as a guide and a point of reference; the y can be modified and progressed under the supervision of your therapist.



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